This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

- 1. (Previously Presented) An electroplating solution for copper comprising CuSO₄·5H₂O, H₂SO₄, HCl, polyethylene glycol with a molecular weight greater than 200, hydroxyl amine sulfate, and hydroxyl amine chloride.
- 2. (Currently Amended) A An electroplating solution according to claim 1 further comprising C1 ions in a range of 50 150 ppm and wherein the hydroxyl amine sulfate is in a range of 0.01 5 g/l.
- 3. (Currently Amended) A An electroplating solution according to claim 1 further comprising C1 ions derived at least from the HCl in a range of 55 125 ppm.
- 4. (Previously Presented) An electroplating solution according to claim 1, further comprising an additive.
- 5. (Currently Amended) A solution according to claim 4, wherein the additive is thiourea, molasses, glucose, tribenzylamine, benzotriazole, or naphthalene sulfonic acid, or (NH₂OH)₂·H₂SO₄.

6. (Currently Amended) An electroplating solution made by comprising adding together:

CuSO₄·5H₂O;

H₂SO₄;

HCl, and;

optionally an additive; and

polyethylene glycol with a molecular weight greater than 200, and either hydroxyl amine sulfate or hydroxyl amine chloride.

7. (Currently Amended) An electroplating solution comprising:

CuSO₄·5H₂O;

H₂SO₄;

Cl⁻ ions, and;

polyethylene glycol with a molecular weight greater than 200; and hydroxyl amine sulfate or hydroxyl amine chloride.

- 8. (Currently Amended) An electroplating solution according to claim 7, wherein the concentration of CuSO₄·5H₂O CuSO₄·5H₂O is 60 150 g/l, H₂SO₄ is 80 150 g/l, Cl⁻ ions are 50 150 ppm, and polyethylene glycol is less than 100 ppm, and optionally an additive.
- 9. (Canceled)